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EXAMINER
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2615	10

DATE MAILED: 03/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>11 December 2003</u>.

2a)☒ This action is **FINAL.**   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-24</u> is/are pending in the application.

     4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) <u>1-12</u> is/are allowed.

6)☒ Claim(s) <u>13-24</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

     a)☒ All   b)☐ Some * c)☐ None of:

       1.☒ Certified copies of the priority documents have been received.

       2.☐ Certified copies of the priority documents have been received in Application No. _____.

       3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

     * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Response to Arguments

1.   Applicant's arguments filed 12/11/03 have been fully considered but they are not persuasive.

Applicant argues with regard to claim 13 that Okada does not disclose, teach or suggest that the specified data size is equal.

In response, applicant is referred to col.22, lines 29-37; col.23, lines 39-48; Fig.39, col.54 line 59 to col.55, line 3 and col.55, lines 52-55, wherein Okada discloses that each of the video and audio packets are equal in size and that the packs/packets are equal in size. Since the packs/packets are equal in size, the transfer/playback time is inherently the same.

Please note that since the limitations "... to be reproduced in synchronization with the first images.... " is cited in the preamble of claims 13&18 only, and not in the body of the claims, no patentable weight is given to such limitations in the rejections of claims 13&18. However, similar limitations in claims 17&22 have been given patentable weight in the rejections of claims 17&22, because such limitations are in the body of the claims.

2.   Applicant's arguments with respect to claims 17&22 have been considered but are moot in view of the new ground(s) of rejection.

The grounds of rejection of claims 17&22 have changed and the rest of the rejections are maintained.

Claim Rejections - 35 U.S.C. § 102

3.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for the purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4.   Claims 13-16&18-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Okada et al (US 6,549,722).

Regarding claim 13, Okada et al disclose a method disk and apparatus for system encoding bitstreams to connect seamlessly thereof, including bitstreams for use in an authoring system for variously processing a data bitstream comprising video data, audio data, and sub-picture data constituting each of plural program titles containing

related video, audio and sub-picture data content to generate a bitstream from which a

new title containing the content desired by the user can be reproduced, and efficiently

recording and reproducing the generated bitstream using a particular recording medium,

comprising the method:

a) dividing each of the first image data and the second image data into a plurality

of data units (packs/packets) each having an equal time length and an equal data size

(see col.22, lines 29-37; col.23, lines 39-48; Fig.39, col.54 line 59 to col.55, line 3 and

col.55, lines 52-55), note that the packs/packets are equal in size and the

transfer/playback time is inherently the same;

b) generating a data stream in which the data units of the first image data are

arranged in a reproduction order, in which the data units of the second image data are

arranged in a reproduction order, and in which each of the data units of the first image

data and each of the data units of the second image data are alternately arranged (see

Fig.70, col.36 lines 18-40); and

c) recording the data stream onto the recording medium (see Fig.2, col.10, lines

7-16; Fig.25, col.26, lines 16-31 and col.28, lines 54-59).

Regarding claim 14, Okada discloses the method wherein the data stream is

generated in accordance with a DVD standard (see col.26, lines 15-31), and each of the

plurality of data units includes one or a plurality of video object units (VOBUs) (see

Fig.16&18; col.20, line 60 to col.22, line 13).

Regarding claim 15, Okada discloses the method wherein the first image data and the second image data are generated by converting variable rate compressed data by using an MPEG compression method into fixed rate compressed data (see col.24, lines 29-47).

Regarding claim 16, Okada discloses the method wherein a plurality of data sets each comprising one of the data units of the first image data and one of the data units of the second image data that is located next to the one of the data units of the first image data are formed in the data stream, and audio data is added to each of the plurality of data sets in the process of generating the data stream (see Fig.16,17&18; col.21 line 63 to col.22, line 28).

Regarding claim 18, the claimed limitations of claim 18 are accommodated in the discussions of claim 13 above.

Regarding claim 19, the claimed limitations of claim 19 are accommodated in the discussions of claim 14 above.

Regarding claim 20, the claimed limitations of claim 20 are accommodated in the discussions of claim 15 above.

Regarding claim 21, the claimed limitations of claim 22 are accommodated in the discussions of claim 16 above.

Claim Rejections - 35 U.S.C. § 103

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as
> set forth in section 102 of this title, if the differences between the subject matter sought to be
> patented and the prior art are such that the subject matter as a whole would have been obvious
> at the time the invention was made to a person having ordinary skill in the art to which said
> subject matter pertains. Patentability shall not be negatived by the manner in which the invention
> was made.

6.   Claims 23&24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okada et

al in view of Yogeshwar et al (US 6,026,232).

Regarding claim 23, Okada fails to explicitly disclose the method wherein in the dividing

process, dummy data is added to the data units each so that the data units have an equal data size.

Yogeshwar et al teach encoding systems in which a section of an encoded bitstream is replaced

with a new section, including video encoding systems in which a section of encoded video is

replaced in a manner which reduces decoding artifacts, comprising packs, and each pack

comprising packet headers and stuffing fields. Yogeshwar further teaches that the structure of

pack 970A is used when the packet 982A occupies between 2034 and 2027 bytes. The stuffing

field 980A allows 1-8 bytes of stuffing to bring the total size of the pack to 2048 bytes. When the

packet for video, audio, sub-picture, or playback information is less than 2027 bytes, a pack

structure 970B as illustrated in Fig.44B is used which has a stuffing 980B of one byte and a

packet for padding 984 which makes the total number of bytes for the packets 982B and 984B to

be 2034 bytes (see Fig. 43,44A&44B; col.60, lines 51-65). Here Yogeshwar teaches the principle

of using padding (dummy data) to bring data units to a desired byte size, in order, for example, to satisfy certain design consideration.

It would have been obvious to modify Okada by realizing Okada with padding means, as taught by Yogeshwar, to bring data units to a desired byte size, in order, for example, to satisfy certain design consideration.

Regarding claim 24 the claimed limitations of claim 24 are accommodated in the discussions of claim 23 above.

7.   Claims 17&22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okada et al in view of Nanba (US 5,541,644).

Regarding claim 17, Okada discloses the method wherein a plurality of data sets each comprising one of the data units of the first image data and one of the data units of the second image data that is located next to the one of the data units of the first image data are formed in the data stream, and synchronization data is added to each of the plurality of data sets in the process of generating the data stream (see col.24, lines 38-55; col.25, lines 48-57 and col.23, lines 50-59 and col.24, lines 38-55).

Okada fails to explicitly disclose a synchronizing data for reproducing the first images with the second images. Namba teaches image reproducing apparatus for reproducing photographed images recorded on a developed film on a television monitor, including a television monitor where in multiple images are simultaneously displayed on

a screen so that, for example, the user can conveniently program a desired presentation (see col.5, lines 9-34; and col.8, lines 28-38).

It would have been obvious to modify Okada by realizing Okada with the means to simultaneously display images on a screen, as taught by Nanba, in order that, for example, a user can conveniently program a desired presentation.

Regarding claim 22, the claimed limitations of claim 22 are accommodated in the discussions of claim 17 above.

Allowable Subject Matter

8.   Claims 1-12 are allowable over the prior art of record.

9.   The following is a statement of reasons for the indication of allowable subject matter: .

Regarding claim 1, the invention relates to an image data reproducing method, and image data reproducing apparatus for reading compressed image data from a recording medium so as to reproduce the image data , and to image data recording method and an image data recording apparatus for compressing image data so as to write the compressed image data onto a recording medium.

The closest reference Okada et al (US 6,549,722) disclose a method disk and apparatus for system encoding bitstreams to connect seamlessly thereof, including bitstreams for use in an authoring system for variously processing a data bitstream comprising video data, audio data, and sub-picture data constituting each of plural

program titles containing related video, audio and sub-picture data content to generate a bitstream from which a new title containing the content desired by the user can be reproduced, and efficiently recording and reproducing the generated bitstream using a particular recording medium.

However, Okada fails to explicitly disclose a method of reproducing at least first images and second images simultaneously, synchronizing the first images with the second images, where the method comprises the processes of wherein, on the recording medium, each of the first image data and the second image data is divided into a plurality of data units each having an equal time length, each of the data units of the first image data and each of the data units of the second image data are alternately arranged on the recording medium, the data units are sequentially read from the recording medium in on order of an arrangement of the data units recorded on the recording medium, the process of storing the first image data and the process of storing the second image data are alternately carried out for each of the data units, and the process of decoding the first image data and the process of the second image data are carried out at a same decoding rate in a parallel manner.

Regarding claim 7, the invention relates to an image data reproducing method, and image data reproducing apparatus for reading compressed image data from a recording medium so as to reproduce the image data , and to image data recording method and an image data recording apparatus for compressing image data so as to write the compressed image data onto a recording medium.

The closest reference Okada et al (US 6,549,722) disclose a method disk and apparatus for system encoding bitstreams to connect seamlessly thereof, including bitstreams for use in an authoring system for variously processing a data bitstream comprising video data, audio data, and sub-picture data constituting each of plural program titles containing related video, audio and sub-picture data content to generate a bitstream from which a new title containing the content desired by the user can be reproduced, and efficiently recording and reproducing the generated bitstream using a particular recording medium.

However, Okada fails to explicitly disclose an apparatus for reproducing at least first images and second images simultaneously, synchronizing the first images with the second images, where the apparatus comprises wherein, on the recording medium, each of the first image data and the second image data is divided into a plurality of data units each having an equal time length, each of the data units of the first image data and each of the data units of the second image data are alternately arranged on the recording medium, the reading device sequentially reads the data units from the recording medium in on order of an arrangement of the data units recorded on the recording medium, an operation of storing the first image data into the first memory device and an operation of storing the second image data into the second memory device are alternately carried out for each of the data units, and the first decoding device and the second decoding device separately and simultaneously decode the first image data and the second image data at a same decoding rate.

10.   THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

Conclusion

11.   Any inquiry concerning this communication or earlier communications from this

examiner should be directed to Christopher Onuaku whose telephone number is (703)

308-7555. The examiner can normally be reached on Tuesday to Thursday from 7:30

am to 5:00 pm. The examiner can also be reached on alternate Monday.

If attempts to reach the examiner by telephone is unsuccessful, the examiner's

supervisor, Andrew B. Christensen, can be reached on (703) 308-9644.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314, (for formal communications intended for entry)

and (for informal or draft communications, please label "PROPOSED" or

"DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,

Arlington. VA., Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application should

be directed to Customer Service whose telephone number is (703) 306-0377.

COO

2/20/04

THAI TRAN
PRIMARY EXAMINER